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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,585	12/28/2000	Robert C. Phillips	205469	6507

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EXAMINER
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STEVENS, ROBERTA A

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/750,585

Applicant(s)

PHILLIPS ET AL.

Examiner

Roberta A. Shand

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-7, 10, 13-17, 20, 21 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Baji (U.S. 5027400).

2. Regarding claim 1, Baji teaches (fig. 1-6) a non-volatile data storage interface unit, for use in an information distribution system configured to distribute information assets stored upon a non-volatile data storage to users (subscribers) via a dynamic data transmission path including a cell-based switching fabric (ATM exchange), the interface unit comprising: a cell transceiver (108, 110) connectable to a cell-based switching fabric (ATM exchange, 109) facilitating transfer of data cells between the non-volatile data storage interface unit (198) and the cell-based switching fabric (ATM exchange, 109), the cell transceiver (108, 110) comprising; a cell transmitter (108) coupled to an output of the non-volatile data storage interface unit (198) and comprising a raw data to cell data formatting circuit; and a cell receiver (110) coupled to an input of the non-volatile data storage interface unit (198) and comprising a cell data to raw data formatting circuit; and a first non-volatile data storage controller (199) interposed between the cell transceiver (110, 108) and the non-volatile data storage (198), the non-volatile data storage controller (199) comprising circuitry for retrieving and forwarding raw data from the non-

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volatile data storage to the cell transmitter; and receiving and storing raw data from the cell receiver to the non-volatile data storage (col. 24, lines 5-27).

3. Regarding claims 2-3 and 14, Baji teaches (figure 1-6) a buffer controller coupled to the non-volatile data storage controller.

4. Regarding claims 4 and 15, Baji teaches (figure 1-6) the switching fabric is ATM

5. Regarding claims 5 and 16, Baji teaches (figure 1-6) the switching fabric is a connection-oriented fabric.

6. Regarding claim 6, Baji teaches (figure 1-6) the cell transmitter is coupled to a plurality of non-volatile data storage controllers (186, 105, 132, 130, 128, 103) including the first non-volatile data storage controller (199).

7. Regarding claims 7 and 17, Baji teaches (figure 5A-5P and col. 4, lines 19-43) circuitry for generating a header for a cell.

8. Regarding claims 10 and 21, Baji teaches (figure 1-6) circuitry (187) processing a header for a cell received from the switching fabric.

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9. Regarding claim 13, Baji teaches (figure 1-6) a method for transmitting data within an information distribution system configured to distribute information assets stored upon a non-volatile data storage (198) to users (subscribers) via a dynamic data transmission path including a cell-based switching fabric (ATM exchange, 109); comprising: receiving, by a receiver (110), a data storage asset read command from the switching fabric (ATM exchange, 109); passing by the receiver (110) to a non-volatile data storage controller (199) the command; receiving from the storage controlled by the data storage controller (199) new data corresponding to the command; first transmitting the raw data to a transmitter circuit (108); packaging (assembling), by the cell transmitter (108), the raw data within cells for transmission on the switching fabric (ATM exchange, 109); and second transmitting, by the cell transmitter (108) circuit, the cells to the switching fabric (ATM exchange, 109).

10. Regarding claim 20, Baji teaches (figure 1-6) a method for transmitting data within an information distribution system configured to distribute information assets stored upon a non-volatile data storage (198) to users (subscribers) via a dynamic data transmission path including a cell-based switching fabric (ATM exchange, 109); comprising: receiving, by a receiver (110), connected to the switching fabric (ATM exchange, 109), a data storage asset read command from the switching fabric (ATM exchange, 109); passing, by the receiver (110) to a non-volatile data storage controller (199) connected to the receiver (110), the command; receiving, by the cell receiver (109), data cells specifying a hard disk address and raw data; extracting (disassembling) by the cell receiver (110), the raw data from the data cell; transmitting by the receiver (110), the

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raw data to the storage controller (199); and storing, by the storage controller (199) connected to the storage (198), the raw data.

11. Regarding claim 24, Baji teaches (figure 1-6) buffering, by the storage controller, the raw data from the data cells prior to storing.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 8, 9, 11, 12, 18, 19, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baji.

14. As for a CRC and HEC generator, it would have been obvious to one of ordinary skill in this art to adapt to Baji's system these error check methods as to ensure quality of service within the system.

***Response to Arguments***

15. Applicant's arguments filed November 22, 2004 have been fully considered but they are not persuasive. Applicant argues that Baji does not teach a non-volatile data storage controller. Applicant is directed to figure 1-6, where the video mail control unit, 199 is depicted which is

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connected to the video mail file, 198 to control the data received from the video mail file. The video mail file is applicant's data storage unit and the video mail control unit is applicant's data storage controller. Applicant also argues that Baji does not teach "passing by the cell receiver to a non-volatile data storage controller, the data storage asset read command". Applicant is directed to figure 1-6 and col. 24, lines 5-27, where it is depicted and explained that a signal (read command) is sent to the video mail file (data storage unit) to receive data therein by way of the video mail control unit (data storage controller). Applicant also argues that Baji does not teach receiving data cells, extracting the raw data from the data cells, and transmitting the raw data to the non-volatile data storage controller. Applicant is directed to col. 1, lines 53 – 61, where it is explained that the cell disassembler 110 removes (extracts) the header thereby transferring post control information concatenated with predetermined data (raw data). Lastly Applicant requests specific identification of references suggesting the well known limitation indicated in the above rejection. Applicant is directed to Norizuki (U.S. 5357510), col. 1, line 54 – col. 2, line 9) where CRC and HEC is used in an ATM system for error detection.

### ***Conclusion***

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

17. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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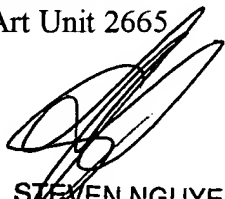
will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberta A Shand whose telephone number is 571-272-3161. The examiner can normally be reached on M-F 9:00am-5:30pm.

19. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Roberta A Shand  
Examiner  
Art Unit 2665



STEVEN NGUYEN  
PRIMARY EXAMINER